Dr. L. Pierce Clark called attention to the similarity of the symptoms in certain of these cases to those of progressive muscular atrophy, which would be in favor of the peripheral origin of the latter disease. Quite a number of the cases presented a scoliosis and atrophy of the smaller muscles of the hand, warranting a diagnosis of beginning syringomyelia. The possibility of extra-cervical rib, therefore, should not be lost sight of in doubtful cases of syringomyelia.

Dr. Alfred S. Taylor said he had never removed a cervical rib, but he had made a great many dissections in that region and he thought it was not at all impossible to remove such a rib without damaging the brachial plexus, which, with careful manipulation, could be displaced quite materially from its ordinary position without interfering with the motor function of the nerves. The operation would require a sufficiently wide dissection and careful work.

Dr. Goodhart, in reply to a question as to whether the sympathetic was ever involved in cases of cervical rib, said that it occurred only in association with syringomyelia.

LANTERN-SLIDE EXHIBITION OF PATHOLOGICAL SPECIMENS OF RARE BRAIN LESIONS

By M. Allen Starr, M.D.

This demonstration included a number of rare brain lesions that came under the observation of Dr. Larkin in his capacity as coroner's physician. They were the post-mortem findings in cases of sudden death, and a preceding history was usually unobtainable. In one of the cases there was an enormous aneurism at the base of the brain, which had produced sudden death, although the man from whom the specimen had been obtained had apparently enjoyed excellent health up to that time. Another specimen showed a series of capillary hemorrhages all over the brain, such as were seen occasionally in alcoholic brains. Another showed a hemorrhage into the floor of the fourth ventricle, and involving the pons Varolii. Another specimen showed an enormous cyst lying at the base of the brain, and resulting from an aneurism from the anterior communicating artery. Another showed a hemorrhage into the ventricle of the brain; this occurred in a leukemic patient, and it was not associated with the rupture of any large blood vessel. Another showed an abscess of the frontal lobe of the brain following an operation on the nose. Another showed an abscess of the brain following middle ear disease. Another showed unilateral absence of the cerebellum.

In the case of aneurism of the base of the brain, Dr. Starr said, the patient was a longshoreman, apparently in his usual health, who sat down at the end of the pier to eat his midday meal. Two days later he was found still sitting there, dead.

Dr. Larkin, who had made the autopsies in these cases in his capacity of coroner's physician, said that in the case described by Dr. Starr in which there had been a hemorrhage into the ventricle of the brain, without apparent rupture of any large blood vessel, the patient was a boy of sixteen years, who while walking along the street suddenly fell to the ground. He was taken to Roosevelt Hospital, and died fifteen minutes later. The post-mortem examination showed that the left ventricle was distended by a clot, but the source of the bleeding could not be made out, excepting small punctate spots in the wall of the ventricle. The patient had an enlarged spleen, and a blood examination made just prior to his death showed lymphatic leukemia.

Dr. G. L. Walton, of Boston, said it would have been interesting to know the histories of the hemorrhagic cases shown by Dr. Starr. The clinical study of such cases had not kept pace with that of intracranial growths, but these hemorrhages at the surface of the brain offered equal opportunity for brilliant diagnosis, and far greater opportunity for successful operation. In a case recently seen in consultation with Drs. Paul and Brewster, a subdural hemorrhage in the right middle fossa was successfully removed as the result of a diagnosis which was based on intense and increasing frontal headache, photophobia, slow pulse and an increase in the right wrist jerk, these symptoms following a blow in the left occipital region. Dr. Paul's conclusion that the hemorrhage was on the right side, based partly upon the location of the blow and partly upon the supposition that the hemorrhage caused pressure of the brain against the skull on the opposite side proved to be well founded.

Dr. Joseph Collins and Dr. Harrison H. Martland read a paper on "The Toxic Effects of Cyanide of Potassium Upon the Peripheral Motor Neurones: A Clinical and Experimental Study." (See this JOURNAL, p. 417.)

Dr. Joseph Collins said he knew of no other case of cyanide of potassium poisoning in which the toxic manifestations were similar to those recorded in this paper. The clinical and experimental studies in connection with this case showed that cyanide of potassium did not produce a neuritis or a poliomyelitis, in the strict sense of these terms, but a degeneration of the entire peripheral motor neurones. The case was interesting, because it corroborated the observations that had been made regarding the destructive effects of lead on the peripheral motor neurones. confirming and paralleling the experiments of Stieglitz made about fifteen years ago. The early symptoms in this case were remarkable and unusual, not at all like those of lead poisoning. They indicated an overwhelming intoxication or infection, and before any knowledge was obtained of the man's occupation, the case was supposed to be one of anterior poliomyelitis.

Dr. J. Ramsay Hunt said that he had observed the case in the acute stage in the New York Hospital. He had regarded it as an acute toxic or infectious process and the question at that time had been raised as to whether the cyanide of potash might have played a rôle. The onset was acute with fever, delirium and retraction of the neck. In addition there were violent, shooting pains in the upper and lower extremities, with retention of urine. No objective sensory disturbances accompanied the motor paralyses. His interpretation of the case had been that of an acute poliomyelitis or disseminated myelitis involving chiefly the gray matter.

Dr. Maitland's experiment was most interesting and conclusive, in showing the effects of cyanide of potassium on the peripheral motor neurones—but that alone would hardly account for the patient's sensory symptoms.

Dr. I. Strauss said that if the case reported by Drs. Collins and Martland had come into their hands last summer while we were experiencing an epidemic of anterior poliomyelitis instead of in 1906, they would probably have classified it under this head. Dr. Strauss had observed a very similar case in the service of Dr. B. Sachs at the Mt. Sinai

Hospital in August of last year. The man was an Irishman of about twenty and he was admitted because of what appeared to be some intestinal intoxication. There were nausea, vomiting and diarrhea, high fever and marked prostration. The day after admission his body was covered with a very profuse maculo-papular eruption and there began to be weakness in the muscles of the legs. This weakness increased to complete flaccid paralysis of the lower extremities and the paresis advanced until arms were affected. The deep reflexes became lost, there was some hyperesthesia along the anterior surfaces of the tibiæ and very marked at the base of the skull. There was rigidity of the neck and retention of urine so that catheterization was necessary. The reaction to faradism was very much diminished in all the muscles of the extremities and the reaction of degeneration followed in the shoulder and upper arm group of muscles including the pectorals. Later a very marked atrophy of the muscles of the limbs especially of the upper followed and has persisted to the present. The patient is recovering although probably will never fully regain normal power in some muscles. This was a typical case of anterior poliomyelitis as it was more frequently observed in children last summer, and as has been described by Wickman in the Swedish epidemic of 1905. It is probably one of the cases complicated with nerve involvement which he classifies as the polyneuritic form.

Dr. Hunt's description of the onset of the disease in Dr. Collins' case as he observed it at the New York Hospital tallies exactly with the one seen at Mt. Sinai. There was fever-paralysis, ascending in type and marked hyperesthesia.

The animal experiments do not explain the symptoms in the case. All that they show is that when cyanide of potash is given to an animal there is a degeneration of the peripheral neurone. There is nothing specific in this action, numerous toxic substances; both organic and inorganic have produced the same lesion in animals. This lesion does not explain the hyperesthesia and other irritative sensory symptoms the case presented in the early stages. The cases of anterior poliomyelitis which Dr. Strauss had so far studied show hemorrhages and a marked leucocytic infiltration of the meninges and posterior spinal ganglia as well, which lesions can account for the symptoms possessed by both Dr. Collins' case and the one Dr. Strauss had described. Another fact which must be borne in mind in discussing this case is that if the use of KCn by waiters is as common as stated by Drs. Collins and Martland it is curious that this should be the first case noted.

In conclusion, therefore, Dr. Strauss thought that neither the clinical symptoms nor the animal experiments were convincing proof that the case was one of poisoning, but he was much more inclined to regard it as a type of anterior poliomyelitis with which we had become familiar through the recent epidemic.

Dr. Sachs said the inference he drew from the findings of Drs. Collins and Martland was that we could no longer consider that the various poisons, both chemical and organic, confined their effects upon the peripheral or spinal neurones, but might affect both the sensory and the motor neurones. Clinically, the case might be regarded as one of multiple neuritis or anterior poliomyelitis. In the case at Mt. Sinai Hospital, to which Dr. Strauss referred, it was impossible to state positively whether it was one of multiple neuritis or poliomyelitis.

Dr. H. C. Van Den Burgh said that in certain mining camps he had seen cyanide of potassium extensively used in connection with the extraction of gold and silver. Cases of poisoning, so far as he knew, were rare in those camps, and in those that he had observed, death was almost instantaneous.

Dr. Larkin said he had seen fourteen cases of cyanide of potassium poisoning during the past year. In most of these, death was almost instantaneous. There was one case of a druggist who was poisoned by dilute hydrocyanic acid, and the morning after he was brought to the hospital there was motor paralysis of both legs. The symptoms resembled those of an ascending myelitis, and death occurred in the course of four or five days. The microscopic examination of the cord in that case showed complete degeneration of the anterior motor cells, not at all unlike what Dr. Martland had described in his experimental work on rabbits. In those cases where instantaneous death had occurred after the use of cyanide of potassium, the microscopic studies had not yet been completed.

CHICAGO NEUROLOGICAL SOCIETY

April 23, 1908

PRESENTATION OF A CASE OF LEONTIASIS OSSEA

By Dr. Charles Louis Mix

The patient is a woman thirty-two years of age. When she was very young she was troubled with nasal catarrh and was treated for it when she was about five years of age. So far as her general appearance is concerned she showed nothing abnormal until about fourteen or fifteen years ago during her seventeenth year, at which time she began to notice a swelling at the inner corner of her left eye involving the nasal process of the superior maxilla. Subsequently other swellings began to appear in the bones of the upper part of the face, especially in the orbital plates of the frontal bone and in the region of the superciliary ridges. As time went on the right nasal process of the superior maxillary bone also began to enlarge, the enlargement continuing until the present time. Not only are the frontal, nasal and superior maxillary bones involved, but the malar bones and the parietals are also concerned in the process. The bi-parietal diameter is very much increased above what should be normal for her head. When her hair is raised from her forehead it will be noticed that the appearance of the face is such that it resembles a triangle, the chin marking the apex and the frontal bone the base. It will be noticed that the distance between the eyes is almost twice the normal amount by reason of the great increase in the ethmoid bone. The eyes are seen to be extremely prominent being pushed forward at least half way out of their sockets, and it will be observed that there is some lack of conjugation in the use of the eyeballs.

The growth has been extremely slow in rate but fairly uniform in increase in size, and although the patient states that she believes the bone enlargement involving the nasal process of the right superior maxillary bone is smaller than it was two years ago, it seems to be about as large as it was when first seen.

She shows no visual change of any sort. There is not a symptom in